

### IN THE CLAIMS

#### Listing of Claims:

1. (Currently Amended) A method of compiling an on-circuit monitor profile used to configuring circuits to characterize the performance of a processing circuit, the method comprising the steps of:

storing, on a first processing system, a set of allowable associations between a plurality of monitors and a plurality of events, wherein the plurality of monitors operate on a second processing system;

presenting, on a display of the first processing system, the set of allowable associations to a user so as to illustrate prohibited monitor and event combinations and prevent selection of prohibited monitor and event combinations;

accepting, on the first processing system, a complete user selected set of monitor and event associations, wherein the user selected set of monitor and event associations is a subset of the set of allowable associations selected from the display; and

preparing a complete monitor profile based on the complete user selected set of monitor and event associations, ~~wherein the monitor profile is to be used to configure on-circuit monitors.~~

2. (Currently Amended) A method according to claim 1, wherein the step of presenting the set of allowable associations comprises the step of presenting a graphical interface to the user that contains a complete presentation of the entire set of allowable associations.

3. (Currently Amended) A method according to claim 1, wherein the accepting step comprises the step of accepting one or more inputs from the user through a graphical interface, wherein the graphical user interface only presents ~~each accepted input selects a valid monitor-event combinations for a plurality of monitors~~ combination.

4. (Original) A method according to claim 1, wherein one or more of the monitors within the plurality of monitors is able to monitor only a subset of the plurality of events.

5. (Currently Amended) A method of compiling an on-circuit monitor profile used for configuring circuits to characterize the performance of a processing circuit, the method comprising the steps of:

storing, on a first processing system, a set of allowable associations between a plurality of monitors and a plurality of events, wherein the plurality of monitors operate on a second processing system;

accepting, through a user interface process on the first processing system, a user selected set of monitor and event associations;

verifying, in the user interface process on the first processing system, that the selected set of monitor and event associations is a subset of the list of allowable associations;

notifying the user if one or more monitor and event associations within the selected set of monitor and event associations is not valid;

assembling, in response to verifying that the selected set of monitor and event associations is a subset of the list of allowable associations, a complete set of selected monitor and event associations; and

preparing, on the first processing system in response to the assembling ~~if the selected set of monitor and event associations is valid~~, a monitor profile based on the ~~user selected complete set of monitor and event associations, wherein the monitor profile is to be used to configure on-circuit monitors.~~

6. (Currently Amended) A system for compiling an on-circuit monitor profile used to configuring circuits to characterize the performance of a processing circuit, the system comprising:

a monitor configuration file, stored on a first processing system, for storing a set of allowable associations of a plurality of monitors and a plurality of events, wherein the plurality of monitors operate on a second processing system;

a display, communicatively coupled to the monitor configuration file, for displaying the set of allowable associations to a user so as to illustrate prohibited monitor and event combinations and prevent selection of prohibited monitor and event combinations;

a user input, operating on the first processing system, for accepting a complete selected set of monitor and event associations from a user, wherein the selected set of monitor and event associations is a subset of the set of allowable associations selected from the display;

a monitor profile output, communicatively coupled to the user input, wherein the monitor profile output comprises the complete selected set of monitor and event associations and is to be used to configure on-circuit monitors; and

a monitor configuration generator, communicatively coupled to the monitor configuration file, the user input, the display and the monitor profile output, ~~for preparing~~ that prepares the data in the monitor configuration file for display on the display and ~~preparing that prepares~~ the complete selected set of monitor and event associations for the monitor profile output.

7. (Currently Amended) A system according to claim 6, wherein the display comprises a graphical user interface that contains a complete presentation of the entire set of allowable associations.

8. (Original) A system according to claim 6, wherein the user input accepts inputs in conjunction with a graphical interface.

9. (Original) A system according to claim 6, wherein at least one of the monitors within the plurality of monitors is able to monitor only a subset of the plurality of events.

10. (Currently Amended) A system for compiling an on-circuit monitor profile used for configuring circuits to characterize the performance of a processing circuit, the system comprising:

a monitor configuration file for storing, on a first processing system, a set of allowable associations of a plurality of monitors and a plurality of events;

a user input interface, operating on the first processing system, for accepting a complete selected set of monitor and event associations from a user,

a monitor profile output, communicatively coupled to the user input, wherein the monitor profile output comprises the complete selected set of monitor and event associations and is to be used to configure on-circuit monitors, and

a monitor configuration generator, communicatively coupled to the monitor configuration file, the user input and the monitor profile output, for verifying that the complete selected set of monitor and event associations is a subset of the list of allowable associations and preparing, if-in response to verifying that the complete selected set of monitor and event associations is a subset of the list of allowable associations ~~valid, the selected set of monitor and event associations for the monitor profile output.~~

11. (Currently Amended) A system for compiling an on-circuit monitor profile used to configuring circuits to characterize the performance of a processing circuit, the system comprising:

means for storing, operating on a first processing system, a set of allowable associations of a plurality of monitors and a plurality of events, wherein the plurality of monitors operate on a second processing system;

means for displaying the set of allowable associations to a user so as to illustrate prohibited monitor and event combinations and prevent selection of prohibited monitor and event combinations, wherein the means for displaying is communicatively coupled to the monitor configuration file;

means for accepting a complete set of user selected ~~selection of a set of~~ monitor and event associations, operating on the first processing system, wherein the complete set of user selected ~~set of~~ monitor and event associations is a subset of the set of allowable associations selected from the display; and

means for outputting a monitor profile, the means for outputting being communicatively coupled to the user input, wherein the monitor profile comprises the complete set of user selected monitor and event associations and is to be used to configure on-circuit monitors on a second processing system.

12. (Currently Amended) A computer readable medium including computer instructions for compiling an on-circuit monitor profile used to configuring circuits to characterize the performance of a processing circuit, the computer instructions comprising instructions for:

storing, on a first processing system, a set of allowable associations between a plurality of monitors and a plurality of events, wherein the plurality of monitors operate on a second processing system;

presenting, on a display of the first processing system, the set of allowable associations to a user so as to illustrate prohibited monitor and event combinations and prevent selection of prohibited monitor and event combinations;

accepting, on the first processing system, a complete user selected set of monitor and event associations, wherein the user selected set of monitor and event associations is a subset of the set of allowable associations selected from the display; and

preparing a complete monitor profile based on the complete user selected set of monitor and event associations, ~~wherein the monitor profile is to be used to configure on-circuit monitors.~~

13. (Currently Amended) A computer readable medium according to claim 12, wherein the instructions for presenting the set of allowable associations comprises instructions for presenting a graphical interface to the user that contains a complete presentation of the entire set of allowable associations.

14. (Currently Amended) A computer readable medium according to claim 12, wherein the instructions for accepting comprise instructions for accepting one or more inputs from the user through a graphical interface, wherein the graphical user interface only presents each accepted input selects a valid monitor-event combinations for a plurality of monitors combination.

15. (Cancelled)

16. A computer readable medium including computer instructions for compiling an on-circuit monitor profile used for configuring circuits to characterize the performance of a processing circuit, the computer instructions comprising instructions for:

storing, on a first processing system, a set of allowable associations between a plurality of monitors and a plurality of events, wherein the plurality of monitors operate on a second processing system;

accepting, through a user interface process on the first processing system, a user selected set of monitor and event associations;

verifying, in the user interface process on the first processing system, that the selected set of monitor and event associations is a subset of the list of allowable associations;

notifying the user if one or more monitor and event associations within the selected set of monitor and event associations is not valid;

assembling, in response to verifying that the selected set of monitor and event associations is a subset of the list of allowable associations, a complete set of selected monitor and event associations; and

preparing, on the first processing system in response to the assembling-if the selected set of monitor and event associations is valid, a monitor profile based on the complete user selected set of monitor and event associations, wherein the monitor profile is to be used to configure on-circuit monitors.

17. (New) A method according to claim 1, further comprising communicating the complete monitor profile from the first processing system to the second processing system through an external interface of the second processing system.

18. (New) A method according to claim 5, further comprising communicating the complete monitor profile from the first processing system to the second processing system through an external interface of the second processing system.

19. (New) A method according to claim 1, further comprising:  
storing the complete monitor profile into a stored complete monitor profile on the first processing system;  
retrieving the stored complete monitor profile; and  
preparing, in response to the retrieving, a restored complete monitor profile based upon the stored complete monitor profile.
20. (New) A method according to claim 1, wherein the presenting comprises displaying the set of allowable associations in its entirety.
21. (New) A method according to claim 2, wherein the step of presenting comprises:  
displaying a plurality of monitors arranged as columns in the graphical user interface;  
displaying a plurality of events arranged as rows in the graphical user interface;  
displaying an indicator at each respective intersection of the rows and the columns that corresponds to an allowable association of a respective monitor and a respective event associated with the respective intersection; and  
displaying no indicator at each respective intersection of the rows and the columns that corresponds to an association of a respective monitor and a respective event associated with the respective intersection that is not allowable.